
IN RE: NON-BINDING ARBITRATION PURSUANT TO THE
FINAL SETTLEMENT STIPULATION, KANSAS V. NEBRASKA AND
COLORADO

No. 126 Original, U.S. Supreme Court

DEPOSITION OF JAMES PRITCHETT

Monday, March 2, 2009
2:11 p.m.

PURSUANT Agreement and the Federal Rules of Civil
Procedure, the above-mentioned deposition was taken
by the State of Nebraska at 1525 Sherman Street, 3rd
Floor, Denver, Colorado before Carol Patterson,
Professional Merit Reporter and Notary Public.

1 APPEARANCES:

2 For Kansas:

3 JOHN B. DRAPER, ESQ.
4 Montgomery & Andrews
5 325 Paseo de Peralta
6 Santa Fe, New Mexico 87501

7 SAMUEL SPEED, ESQ.
8 Assistant Attorney General
9 Civil Litigation Division
10 120 SW 10th Avenue, 3rd Floor
11 Topeka, Kansas 66612-1597

12 For Nebraska:

13 DON BLANKENAU, ESQ.
14 Husch Blackwell Sanders LLP
15 206 South 13th Street, Suite 1400
16 Lincoln, Nebraska 68508

17 JUSTIN D. LAVENE, ESQ.
18 Special Counsel to the Attorney General
19 State of Nebraska
20 2115 State Capitol
21 Lincoln, Nebraska 68509-8920

22 For Colorado:

23 PETER J. AMPE, ESQ.
24 First Assistant Attorney General
25 AUTUMN BERNHARDT, ESQ.
Assistant Attorney General
Office of Attorney General for Colorado
1525 Sherman Street, 7th Floor
Denver, Colorado 80203

Also present in person: James Schneider

Also present appearing via telephone:

Burke Griggs
Chris Grunewald
Bill Golden
Terry Kastens
Kevin Dhuyvetter
Allen Featherstone

I N D E X

EXAMINATION

PAGE

Monday, March 2, 2009

By Mr. Draper

4

By Mr. Ampe

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By Mr. Speed

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EXHIBITS

INITIAL REFERENCE

1 Republican River Compact Arbitration
Narrative Biography of James Pritchett, Ph.D.

6

2 Colorado Crop Water Allocation Tool,
Luke Brummel and James Pritchett

14

3 Northwest Kansas Farm Management
Association Profit Center Analysis:
5-Year Average & 2006 Irrigated (ALL) Corn

17

(Attached to original transcript.)

1 P R O C E E D I N G S

2 JAMES PRITCHETT,

3 having been first duly sworn, was examined and
4 testified as follows:

5 EXAMINATION

6 BY MR. DRAPER:

7 Q Good afternoon, Dr. Pritchett.

8 A Afternoon.

9 Q Would you state your name for the
10 record, please.

11 A James Gregory Pritchett.

12 Q And what is your professional position
13 and address?

14 A I'm an associate professor in the
15 Department of Agricultural and Resource Economics at
16 Colorado State University. That's in Fort Collins,
17 Colorado.

18 Q And I understand from your counsel that
19 this may be the first deposition that you have given;
20 is that right?

21 A Yes, it is.

22 Q Well, if the depositions we have been
23 taking in this case so far are any guide, this should
24 go very smoothly for you. I will be asking you a
25 series of questions; and if you don't understand any

1 question, please ask me to clarify it. Sometimes
2 these questions have compound parts and so you need
3 to let me finish speaking so that you are sure you
4 understand my question.

5 If you need to take a break at any time,
6 just let me know and we will be glad to do that.

7 I'm asking these questions over the
8 telephone today. You have a number of people there
9 in person, including Sam Speed, one of our attorneys
10 from Kansas, and he will provide you documents, to
11 the extent we need them, as we go through the
12 questions.

13 My thought is that, unless you would
14 like to take a break earlier, after half an hour, 45
15 minutes, we might -- or an hour, somewhere in there
16 that seems appropriate, we will take a break and that
17 will be a 10- or 15-minute break, for you to relax,
18 speak with your counsel, as far as I'm concerned.
19 And we will, if it's all right with everybody, we
20 might use this line to have a private discussion
21 among the Kansas representatives.

22 MR. AMPE: That would be perfectly
23 appropriate, John.

24 Q (BY MR. DRAPER) All right. Well, with
25 that, Doctor, do you have any particular questions

1 about this process that we might address right away,
2 just so that we are sure that you are as comfortable
3 as possible as we get into this.

4 A No, I don't have any questions.

5 Q We are doing this, I note for the
6 record, under agreement by counsel that we would take
7 your deposition today.

8 And I would like to ask Mr. Speed to
9 provide you, if you don't already have one with you
10 there, a copy of your curriculum vitae, a three-page
11 document that we received from counsel, Mr. Ampe.

12 And I would ask that this be marked, as
13 far as the number, shall we mark Exhibit No. 1?

14 THE COURT REPORTER: Yes.

15 (Deposition Exhibit 1 was marked.)

16 Q (BY MR. DRAPER) This will be Exhibit
17 No. 1 for your deposition. If you have a copy
18 there, Doctor, will you confirm that, please.

19 A Yes, I do.

20 Q And this indicates you are currently an
21 associate professor at the Colorado State University,
22 as you stated earlier. This appears to be a position
23 that you have held since July of 2007; is that right?

24 A That's right.

25 Q You received your Ph.D. from the

1 University of Minnesota; is that right?

2 A That is correct.

3 Q That was in 1999?

4 A Yes.

5 Q Did you do a dissertation in connection
6 with that?

7 A Yes, I did.

8 Q What was the subject of your
9 dissertation?

10 A I dealt with the evolution of the hog
11 industry in the United States and the extent to which
12 backward integration would affect open market prices
13 for live hogs.

14 Q Offhand, at least to me, it doesn't
15 sound like that has any direct implication to any
16 issues that are presented to you in this case; is
17 that correct?

18 A That's correct.

19 Q However, I understood you have been
20 involved since receiving your Ph.D. in a good bit of
21 work that may have some relevance to the issues in
22 this case, would you agree?

23 A That's correct.

24 Q Would you describe that experience since
25 you received your Ph.D. that you believe is relevant

1 to the issues in this proceeding.

2 A Yes. I entered the Department of Ag and
3 Resource Economics at Colorado State University in
4 2001. Soon thereafter, I became involved in
5 assessing the economic contribution that irrigated
6 agriculture makes to the South Platte River Basin as
7 a result of some ongoing institutional discussions.

8 That came to the notice of the area
9 extension educator in Akron, Colorado, which overlies
10 the Republican River Basin. The Republican River
11 Conservation District had recently been formed and
12 they were interested in learning more about the
13 economic activity of irrigated acres in that area.
14 So I performed some analysis related to that and made
15 reports to the board and provided them with
16 documents.

17 The water area continued to be one of
18 requests from stakeholders in Colorado. So I also
19 had the opportunity to work research and extension
20 and outreach in the area of limited irrigation, so
21 how farm profitability is impacted by reduced water
22 supplies and also assessing the economic contribution
23 of irrigated agricultural to river basins in
24 Colorado.

25 Q Did the work that you have just

1 described result in any publications?

2 A Technical documents through the Colorado
3 Water Resources Research Institute, primarily. Also
4 Extension Fact Sheets.

5 Q And are those publications, those
6 technical documents, are they available on, for
7 instance, websites of the supporting institutions?

8 A Yes.

9 Q Would you state where those are located,
10 then.

11 A Certainly. At the Colorado Water
12 Resources Research Institute, which has been renamed
13 to Colorado Water Institute website. And I can't
14 recall URL exactly, but I believe it's
15 www.cwi.colostate.edu. They would fall both under
16 the heading of Completion Reports and Special
17 Reports.

18 Q And that would cover both of the
19 activities that you just mentioned?

20 A I don't recall for certain, but I
21 believe that to be correct.

22 Q And have you been involved in the
23 publication of any other documents since you have
24 been at Colorado State University?

25 A Yes, I have.

1 Q What are those?

2 A Documents related to the consumer
3 response to food-borne -- or food-safety scares,
4 would be an example. There are other articles that I
5 have been involved in, including a survey of Colorado
6 farmers related to water leasing markets and other
7 documents, as well.

8 Q Are there any that relate particularly
9 to the use of irrigation water?

10 A I can't recall for certain. The
11 emphasis of my work would be in those technical
12 documents that we have mentioned previously.

13 Q I would like to ask Mr. Speed to provide
14 you with copies of a document entitled "Colorado Crop
15 Water Allocation."

16 And, Carol, if we could mark that as the
17 next exhibit, please. That will be Exhibit No. 2.

18 (Deposition Exhibit 2 was marked.)

19 Q (BY MR. DRAPER) Doctor, do you have a
20 copy of that document?

21 A I do.

22 Q Could you describe that, what the
23 purpose of this document is, the context in which you
24 prepared it and what your involvement was.

25 A The document is part of an ongoing

1 research and extension area that I am involved in
2 having to do with helping farmers make decisions
3 about how to allocate scarce water resources. In
4 particular, the research assistant and I were
5 interested in developing an Xcel spreadsheet that
6 would assist producers in sorting out different
7 alternatives that they may have.

8 Embedded in the spreadsheet are
9 essentially net profit calculations, a very -- it's a
10 -- just that: an Xcel spreadsheet. The document
11 describes a little bit about that spreadsheet; but
12 probably, more importantly, discusses how a farm's
13 profits or its economic profitability might change as
14 a result of having scarce water resources.

15 Q When did you put this together?

16 A You know, I'm not certain, but I believe
17 this was put together about this time last year for
18 the Central Plains Irrigation Conference, which was
19 held in Greeley, Colorado.

20 Q And is the spreadsheet that you refer
21 to, is that available on the web or otherwise?

22 A It is available. It has been updated
23 since this document came out. It's available at the
24 Internet address listed on the second paragraph of
25 page 153.

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1 Q Page 153, does that just indicate that
2 it's part of a larger volume?

3 A That's correct. I believe this is from
4 the Proceedings, although the full document isn't in
5 front of me.

6 Q Do the principles that -- let me just
7 clarify first.

8 You have a coauthor Luke Brummel, it
9 appears. How did -- how much of this is your work
10 and how much of is Mr. Brummel's?

11 A Mr. Brummel is a research assistant
12 getting his master's degree the Colorado State
13 University. He would have assembled and designed the
14 spreadsheet under my supervision. We would
15 collaborate on its eventual look and feel and on the
16 document itself.

17 Q I see. So he is -- at least at that
18 time, he was a graduate student of yours?

19 A Yes.

20 Q And also a research assistant?

21 A Yes.

22 Q Given the typical nature of those
23 relationships, this is something that reflects your
24 views as to how these issues ought to be treated.

25 Would that be a fair statement?

1 A Yes.

2 Q And does this -- do the principles that
3 are in this -- mentioned in this document, do they
4 have any application to the issues that we are
5 dealing with, or that you are dealing with in your
6 work in this interstate arbitration?

7 A If you could clarify. I don't
8 understand what you mean by "principles," I guess,
9 underlying that. Would they be related to
10 profitability? Would they be related to crop water
11 response function? Would they be related to regional
12 economic impacts? All of those seem to be at issue
13 in this case.

14 Q Right. So it sounds like you are saying
15 that there are a number of principles that came into
16 play in this Colorado Crop Water Allocation Tool that
17 are also used, or relevant to your analysis in the --
18 in the work you are doing in this interstate
19 arbitration?

20 A I think it would be clear to say that
21 they come from the same body of knowledge; but to the
22 extent that it represents analysis that I have
23 performed in this arbitration, I wouldn't say that
24 they are necessarily the same.

25 Q Well, that's helpful.

1 In terms of the same body of knowledge,
2 what are you thinking of when you say that there is
3 some commonality, if I may use that word, between
4 principles you applied in this water allocation tool
5 and the work that you are doing in -- in this case?

6 A I think that some of the commonality
7 would include that yields and the amount of water
8 that is applied are related to one another.

9 I believe that the inputs that are used
10 in order to produce crop may be adjusted to reflect
11 what those yields are; that both of those influence
12 profitability overall. And in this context, the crop
13 decision tool is about choosing crops based on
14 profitability. And certainly, that could be an issue
15 or a body of knowledge that is addressed in this
16 arbitration.

17 Q Just looking at Exhibit No. 1 again, it
18 appears you have been doing some work in water
19 resource management in Afghanistan. Is that in
20 recent years?

21 A Actually, that is. That is recently --
22 a project that recently began.

23 Q Well, that sounds very interesting.

24 Could you say just a few words about
25 that for us.

1 A Certainly. Colorado State University is
2 part of a larger consortium that includes other
3 universities working on an USAID project in
4 Afghanistan to help build capacity that would be sort
5 of the institutional and human resources for
6 revitalizing irrigated agriculture there.

7 In some areas, there is a lack of
8 infrastructure. In other areas, there is a lack of
9 knowledge. There is also a lack of water resources
10 so some of our limited irrigation techniques apply to
11 the Afghanistan project.

12 Q Well, that sounds challenging.

13 Does that mean you have to go over
14 there?

15 A I do.

16 Q Well, good luck.

17 A We are taking volunteers.

18 Q I'm sure we all appreciate your work
19 over there.

20 Looking at the third page of Exhibit No.
21 1, which is your CV, first item under "Recent
22 Relevant Research" is entitled "Economic Impacts of
23 Reduced Acres: Example of the Republican River
24 Basin."

25 What is that publication?

1 A This was -- the publication itself is
2 the Colorado Water Newsletter, which the Colorado
3 Water Resources Institute publishes on a regular
4 basis. It summarizes an investigation we made of the
5 potential retirement of wells in the Republican River
6 Basin of Colorado and discussed what those economic
7 impacts were likely to be.

8 Q Is a copy of that available on the
9 website of the Water Resources Research Institute?

10 A I'm not certain, but that would be --
11 that would be likely.

12 Q Can you say a few words about what that
13 project involves, the one that you just mentioned.

14 A The project was interested in examining
15 the economic activity generated by irrigated acres in
16 the Republican River Basin, with the idea that some
17 of those acres might be retired as part of a
18 conservation reserve enhancement program.

19 It examined what would be the likely
20 economic impact of the retirement of those acres,
21 using standard regional economical analysis
22 techniques.

23 The purpose of the document was to
24 better inform stakeholders in that area of the
25 importance of irrigated agriculture and to help them

1 make decisions.

2 Q Did you prepare a technical report other
3 than what appears in the publication Colorado Water?

4 A I don't believe there was another
5 technical report that was specific to the Republican
6 River Basin.

7 Q I'm just thinking of this particular
8 project. It sounds as if this is, perhaps, a summary
9 that appeared in the newsletter and that there was,
10 perhaps, an underlying technical report I would need
11 to check.

12 A I would need to check again, but I don't
13 believe there is an underlying technical report
14 associated with it.

15 We had a larger research effort taking
16 place that was part of the 2006 article, which is
17 above the "Economic Impact Analysis of Irrigated
18 Acreage in Four River Basins in Colorado," and we --
19 it was a similar research effort. So probably
20 subsumed in that.

21 Q The 2006 project, the title mentioned
22 four river basins. Is one of those the Republican?

23 A Yes, that's correct. That's one of
24 those four basins.

25 Q And this technical analysis that may

1 have been summarized in 2005 respecting the
2 Republican River Basin, if it exists, would be in the
3 report that is mentioned here, "Colorado Water
4 Resources Research Institute Completion Report No.
5 207"?

6 A It was a similar research thrust, but
7 you would not find the exacted same details within
8 that report. It consisted of an evolution of the
9 work that we had done, so they would not be exactly
10 the same.

11 Q Would it be possible to provide us with
12 a copy of the Completion Report No. 207?

13 A Yes.

14 Q Thank you very much.

15 MR. DRAPER: Pete, if you could help us
16 with that, that would be very kind of you.

17 MR. AMPE: Absolutely.

18 Q (BY MR. BLANKENAU) Doctor, in your
19 analysis of the Republican Basin that appears in the
20 2005/2006 research projects that we have just been
21 discussing, did that analysis have anything in
22 common with the work you are presently doing for the
23 -- for this particular interstate arbitration today?

24 A Yes.

25 Q Could you describe the issues that you

1 feel are common?

2 A Mr. Ampe had me review a report that had
3 come as part of the arbitration from the State of
4 Kansas.

5 In that report there is a mention and
6 analysis of regional economic impacts. The impacts
7 are described as being both direct and indirect
8 activity. The direct and indirect activity is
9 something that is discussed within that completion
10 report and is part of the analysis that we performed.

11 Q Any other issues in common?

12 A I think those would be the primary
13 issues in common. I can't think of any at this time,
14 but I would need to review the report.

15 Q Did you determine lost profits, for
16 instance, of direct impacts?

17 A We did measure direct impacts, but not
18 necessarily as lost profits, as is in the Kansas
19 report.

20 Instead, we quantified what the direct
21 sales would be coming from irrigated acres in the
22 Republican River Basin and what the value of the
23 inputs used, trying to understand how -- how a -- how
24 revenues were distributed among different inputs.

25 So in that sense, it's not really

1 profits that we are talking about, but instead,
2 economic activity. And that would have been the
3 focus of the analysis.

4 Q Did you analyze the value of the
5 economic activity in Colorado in the Republican River
6 Basin that would be affected by retirement of water
7 rights?

8 A It would be more specific to say that we
9 valued the economic activity generated by irrigated
10 agriculture because it would be hard to forecast what
11 the economic impacts would be precisely from our
12 analysis.

13 Q You looked back to recent periods to
14 determine what the value of economic activity
15 associated with the acreage that might be retired in
16 the future had been?

17 A That's correct.

18 Q Do you recall how many -- how many acres
19 were involved in your analysis of irrigation that
20 would be retired?

21 A I don't recall for certain. It would
22 have been in the area of 30,000 acres.

23 Q And in addition to direct impacts, did
24 you also find that there were indirect impacts as a
25 result of cessation of irrigated agriculture?

1 A I think it would be correct to say we
2 found there was indirect activity generated by
3 irrigated agriculture; but again, it would be hard
4 for us to forecast the impacts.

5 Q Did you quantify the past indirect
6 activity?

7 A Yes.

8 Q Doctor, what courses do you teach at the
9 undergraduate level?

10 A In my time at Colorado State University,
11 I have taught orientation to agricultural systems,
12 enterprise analysis; agribusiness management, a
13 Capstone course; agricultural finance at both a 300
14 and 400 level. I have also had the chance to teach
15 at Purdue University the Gray marketing class and the
16 agricultural marketing class. And I taught
17 agricultural marketing at Colorado State University
18 as well.

19 Q Do you also teach graduate courses?

20 A I do teach graduate courses, on
21 occasion.

22 Q And what courses have you taught at the
23 graduate level?

24 A The agricultural product marketing
25 course at Colorado State University; a similar course

1 at Purdue university; and world economics for
2 business, which is part of the MBA program at
3 Colorado State University.

4 Q Have you ever testified before as an
5 expert witness?

6 A I had one occasion to appear before the
7 state legislature as an expert witness to comment on
8 a piece of legislation. That's the only other time.

9 Q And what was the subject of your
10 testimony there?

11 A At that time, there was a bill that was
12 being heard by the House Agricultural Committee that
13 sought to provide compensation for basins whose water
14 resources had been shifted to another basin.

15 Q When did you give that testimony?

16 A I'm not certain that I recall, but I
17 believe it was in 2003. And it would have been
18 during the legislative session, so perhaps
19 February/March of 2003.

20 Q I would like to turn our attention now
21 to your report in this case. I will identify it for
22 the record. "Reviewing the Assumptions, Methods and
23 Results of: Economic impacts of Kansas Diminished
24 Surface Water Supplies to the Lower Republican River
25 Basin Caused by Nebraska in 2005 and 2006," by

1 Dr. James Pritchett, dated 16 February, 2008.

2 Do you recognize that identification,
3 Doctor?

4 A I do.

5 Q Do you happen to have a copy of that
6 there?

7 A I do.

8 Q Did anyone else work with you or assist
9 you in preparing this report?

10 A No. This is my work alone.

11 Q And what was the -- what was your
12 overall purpose in preparing this report?

13 A Mr. Ampe had asked me to review the
14 economic analysis that had been performed as a result
15 of this arbitration to better understand how the
16 damages were calculated, to review the steps and
17 stages and methods that were used and to gain a
18 better understanding of those.

19 Q And what did you do in terms of your
20 preparation to perform this work and the
21 investigation you did in preparing to write -- write
22 this report?

23 A I reviewed documents that Mr. Ampe had
24 provided me in order to better understand the
25 situation. I read the report that had been provided

1 to me, in particular, about the economic impact
2 assessments. I examined references that were cited
3 within that text and then I began to perform similar
4 calculations of my own to examine what exactly the
5 data had come from that was used in the report and to
6 understand the methods that were used in the report.

7 Q The documents that you reviewed for
8 purposes of your analysis were the economic report by
9 the Kansas experts and the references that were
10 designated in that Kansas economic report?

11 A That's correct.

12 Q Did you review any other documents?

13 A I would have accessed documentation that
14 appeared on the Internet that would have been related
15 to, as an example, the Kansas Farm Management
16 Association's costs over -- historical costs over
17 some time.

18 I'm not certain of other documents I may
19 have looked at; but certainly, I scanned other
20 documents that might be available.

21 Q Primarily, are these the type of
22 documents that you could access on the Internet?

23 A That's correct.

24 Q Did you go out to the area in question,
25 the Republican River Basin, in the lower part of the

1 basin there in Kansas?

2 A No, I did not.

3 Q Have you ever been in the Kansas
4 Bostwick Irrigation District?

5 A No, I have not.

6 Q Would you state your general conclusions
7 -- we will have plenty of opportunity to go into
8 detail, but just to begin with, what were your
9 general conclusions by the Kansas economic experts?

10 A The Kansas reports specifies two types
11 of damages that were assessed. One type would be
12 forgone farm profits. The other type would be a
13 regional economic impact nature.

14 The forgone profits were calculated -- I
15 think it would be useful to say that there is a
16 variety of information used in order to calculate
17 those profits, which includes prices and yields and
18 costs. To the extent that I could review the prices
19 and the yields and the costs, I did. To the extent
20 that I couldn't, I supplemented some of my own
21 information.

22 What I found were, were that prices
23 seemed to be representative, but not exactly the
24 same, and it was difficult for me to verify how the
25 Kansas report determined its prices.

1 Yields were derived using a modeling
2 procedure, a crop water response model, as well as an
3 economic model; but the yields, in particular
4 themselves, seem to be large, relative to what
5 national agricultural statistics would be and also
6 trends yields. And in particular, the model
7 predicted yields seem to have been increased to
8 represent yields that were reported within the KBID
9 district report.

10 Using an alternative assessment of
11 yields that were based on National Agricultural
12 Statistic Service and National Agricultural
13 Statistics Service prices and costs that were
14 reported in the Farm Management Association, I found
15 that forgone profits might be something less than
16 what was reported in the Kansas report.

17 In terms of the regional economic
18 impact analysis, I was unable to verify the economic
19 assumptions and methods within the social accounting
20 matrix that was used in the assessments, but it did
21 list both direct and indirect impacts that seemed
22 reasonable, given what I had researched in the past.

23 Q Thank you.

24 And did you find that the approach based
25 on modeling of yields was an appropriate way to

1 analyze the question of what the losses to Kansas
2 were as a result of shortfalls in the delivery of
3 water?

4 A I'm unable to directly examine the model
5 that was used in the Kansas report, the IPYsim model.
6 I was able to review some of the documentation that
7 is related to it, including the Stone article. It
8 would seem that the relationship between decreased
9 yields and decreased applied irrigation water would
10 be true.

11 It is the -- so the crop water response
12 I find to be -- the general principle to be
13 appropriate; but the manner in which yields were
14 increased to reflect a higher yield, particularly in
15 2005, I'm not sure that I find that appropriate.

16 Q Is it correct, then, to say that from
17 your point of view, the approach using yield model
18 and farm budget was appropriate, in your view,
19 although you would differ with some of the values
20 that were used by the Kansas experts?

21 A I think it's appropriate to use a crop
22 water model to reflect reduced yields to describe a
23 farm's lost profits as a result of less delivered
24 irrigation water.

25 Q And is it appropriate, in your view, to

1 make these determinations of changes in profit on a
2 farm level and then aggregate those for the
3 particular area that is relevant to this analysis?

4 A I think there are challenges in
5 aggregating from the farm level to a regional level
6 and many of those challenges have to be studied to
7 determine how representative that is.

8 Q Did you find any problems with the way
9 the Kansas experts have done it?

10 A I haven't reported any challenges within
11 my report that would suggest that they weren't
12 examined. That would be something that -- that I did
13 not consider deeply and would need the opportunity to
14 go back and revisit.

15 Q Is it more appropriate, in your view, to
16 analyze these issues from a regional standpoint and
17 not begin at the farm level?

18 A Not always.

19 Q Is it correct to say that the general
20 approach of starting at the farm level and then
21 aggregating to the larger area can be appropriate if
22 it's done correctly?

23 A Yes.

24 MR. DRAPER: Well, I think we have made
25 a good start. Why don't we take a break. It's just

1 about 3:00, and I would suggest that we take a
2 15-minute break and reconvene at 3:15.

3 MR. AMPE: That would be fine. We
4 will -- Colorado and Nebraska will vacate the room so
5 you guys can have the room to yourselves to discuss
6 as necessary.

7 (Break was taken.)

8 Q (BY MR. DRAPER) Dr. Pritchett, how are
9 you doing at point in your first deposition?

10 A I'm doing well, thank you.

11 Q Well, again, let us know if there is
12 anything that we can do to help that situation; if it
13 should come up, be glad to take a break if necessary.
14 My present intention is that we will go for another,
15 perhaps similar period, take another break and then
16 -- and then reconvene for a final wrap-up.

17 Just to return to a couple of questions.

18 I want to mention for the record that we
19 have -- I have requested of Mr. Ampe the documents
20 and analysis of yours that underlie your expert
21 report in this case. And he indicated that although
22 he was not able to provide them today, he would do so
23 soon as practicable. And I just wanted to confirm
24 that with you, Pete, and also with you, Doctor.

25 MR. AMPE: Yes, that's correct, John.

1 For the record, I didn't actually check my email
2 until Saturday afternoon, but I was able to get in
3 touch with Dr. Pritchett and he took a little time
4 away from his family to talk to me about documents
5 and we will get them to you as soon as we can.

6 MR. DRAPER: Okay, I appreciate that
7 very much.

8 Q (BY MR. DRAPER) On the issue of your
9 testimony before the Colorado Legislature, that was
10 on House Bill 03-1113. Does that sound correct?

11 A That's correct.

12 Q And I understand that your comments,
13 along with those of your co-proposers, appeared in
14 the August 2003 Agricultural and Resource Policy
15 Report No. 8 of Colorado State University.

16 Does that sound correct?

17 A That's correct.

18 Q Doctor, do you ever perform the function
19 of a peer-reviewer for academic journals?

20 A I do.

21 Q Could you describe that activity in the
22 particular journals that you have -- either in the
23 past or presently, have acted as a peer-reviewer for.

24 A Certainly. The process is to -- an
25 editor will contact me with a manuscript that needs

1 to be reviewed. I will evaluate if the document is
2 suitable for publication, if it could be published
3 with revisions or if it's not suitable to be
4 published. I will write up those comments to the
5 authors and to the editor and then provide that
6 review back to the -- back to the editor for their
7 evaluation.

8 I don't know that I could give a
9 comprehensive list of all of the journals that I have
10 reviewed for, but they would arrange from American
11 Journal of Agricultural Economics to the Canadian
12 Journal of Agricultural Economics to the Journal of
13 Agricultural and Resource Economics and others.

14 Q If you gathered up all of those, would
15 that be 5 or 10 or 15, what would you estimate?

16 A Do you mean the number of journals or
17 the number of reviews that I have performed?

18 Q The number of different journals.

19 A It would be difficult for me to say for
20 certain, but I'm certain that it would be -- did I
21 just say it was difficult to be certain, but I'm
22 certain?

23 It's more than five, probably more than
24 ten.

25 Q Doctor, we also talked a little bit

1 earlier about the use of crop production functions
2 and farm budgets to analyze the economic impacts of
3 reduced water for irrigation.

4 When you are talking about the
5 reductions in water, as opposed to the total absence
6 of water, is there any other approach that is
7 preferable than using that combination of production
8 functions and farm budgets to determine the forgone
9 profits?

10 A I'm not sure that is something that I
11 can answer comprehensively. I would need to review
12 literature in order to make a determination. I would
13 say that I think that that is the technique that I
14 have used.

15 Q Obviously, you think it's a good
16 technique for that kind of an issue?

17 A That technique has been useful in the
18 analysis that I have done.

19 Q One more question on your testimony at
20 the Colorado Legislature. Do you know if that bill
21 passed that you testified on?

22 A It failed. It had made it through the
23 House Ag Committee, but then failed upon second
24 reading in the legislature.

25 Q And it hasn't been reintroduced since

1 that time?

2 A I'm not aware. I wouldn't be able to
3 comment on that.

4 Q To the extent of your knowledge, it
5 hasn't been reintroduced?

6 A Again, yeah, to extent of my knowledge,
7 I'm not aware of that.

8 Q Let's turn to your report, the one that
9 I identified earlier starts out and entitled
10 "Reviewing the assumptions, Methods and Results of:"
11 and then names the Kansas report.

12 Do you have your copy handy there?

13 A I do.

14 Q Turning over to page 3, looking at the
15 bottom -- I might just check now to see if our copies
16 print out the same way.

17 Does the bottom of page 3 have, the last
18 line saying "prices, I am adopting" --

19 A Yes.

20 Q That's the way that last line starts?

21 A Yes.

22 Q Is that a yes?

23 A Yes.

24 Q Okay, great.

25 Okay, it sounds like our page references

1 then can be consistent if we do that.

2 And I would like to direct your
3 attention to the bottom of page 3. Really at that
4 spot, you indicate that you adopted an alternative
5 source of prices that differs from the Kansas
6 experts. They were using KBID prices, whereas you
7 decided to use the National Agricultural Statistic
8 Service, or NASS, prices for your purposes; is that
9 right.

10 A The prices that I observed in the -- in
11 the economic impact analysis, I imputed from the
12 annual report which listed a total value of
13 production in a number of bushels or tons, depending
14 on what the case may be, and I was able to impute
15 what those prices were. So I assume that they came
16 from that report.

17 The prices that I used in the
18 alternative were to either look at the National Ag
19 Statistical Services reported price, or the Farm
20 Service Agency loan rate for that area, whichever was
21 larger.

22 Q Could you take a second and explain to
23 me why you had that alternative of FSA loan rate.

24 A I think if we were interested in the
25 forgone profits from farms, we would like to be able

1 to proxy the price that would have been received for
2 the crop. The price may be a cash price that they
3 received for the crop or, in the case when cash
4 prices are below a government rate, the FSA loan
5 rate, farmers have the opportunity to receive that
6 price because an additional payment is made to those
7 farmers based on the actual production that they
8 have.

9 Q Okay. So, in other words -- I am
10 probably not using the term correctly, but like a
11 farm support where they will make up the difference
12 if it's below a certain specified price loan?

13 A That's correct.

14 Q And why did you choose the NASS prices
15 instead of the FAS loan rate, rather than the actual
16 Kansas Bostwick Irrigation District, I will say that
17 full name. We are probably going to use that term
18 and the short version as KBID bid or K-B-I-D, for the
19 court reporter's benefit.

20 Why did you use the NASS prices or FSA
21 loan rate, as opposed to the K-B-I-D or KBID prices?

22 A I was unable to verify how the KBID
23 prices were determined.

24 Q Did you say that you imputed them from
25 the KBID annual reports?

1 A Yes, that's correct.

2 Q And did that -- did that match up pretty
3 well with the prices that the Kansas experts were
4 using?

5 A Yes, it did.

6 Q It was possible to derive from the KBID
7 annual report the KBID actual prices?

8 A I don't believe that I could say that.
9 The prices that I imputed were taking the value of
10 the bushels produced and divide it by the total
11 bushels, so I was able to derive a price.

12 The value of production, I'm not aware
13 of how the KBID annual report collects that value of
14 production information. So I -- other than being
15 able to read it in that document, I'm not aware of
16 how the prices were determined, much less the bushels
17 themselves.

18 Q I see. So it was clear that the value
19 and the number of bushels reported, but as to how the
20 value and the bushels respectively were themselves
21 determined was not clear?

22 A That's correct. And to be truthful, I
23 can't say that that is how the Kansas experts derived
24 the prices either. That is how I imputed the prices
25 from the annual report.

1 Q And you -- by doing that, you were able
2 to match the prices that they reported?

3 A It appeared that they were the same.

4 Q What kind of information about the value
5 of production did you need in order to make a
6 determination whether prices based on that were
7 valid?

8 A That's a -- I wonder if you might
9 clarify that question so that I can better understand
10 what you are asking.

11 Q Okay, sure.

12 You said that there were two problems
13 that you had in verifying the Kansas prices. One was
14 you didn't know how the value of production figures
15 were obtained that appear in the KBID annual report.
16 And secondly, you didn't know how the number of
17 bushels was determined.

18 And I want to take each one of those
19 separately and understand what you needed to know
20 about those values in order to make a determination
21 as to whether the Kansas experts had used them
22 appropriately?

23 A In order to assess the accuracy of the
24 value of the production information, I would like to
25 know how the information was collected; how it was

1 reported; if it was sampled, how representative the
2 sample would be of the entire KBID District. I think
3 that I would need to actually prepare a more
4 comprehensive list of things that I would need, but
5 those are the first things that I can think of.

6 Q And would those comments apply both to
7 the value of the production information and the
8 number of bushels?

9 A That's correct.

10 Q And so what is provided by the district
11 annual report itself, you did not feel that without
12 further verification of those matters, that it would
13 be possible for you to rely on those figures?

14 A Mr. Ampe had asked me to evaluate how
15 the economic losses were calculated. Part of that, I
16 think, is to evaluate where the data comes from to
17 calculate those economic losses. And I could only
18 evaluate the data to the extent that it was reported
19 in the -- in the KBID annual reports.

20 Q So you went instead to the NASS prices.
21 With respect to the NASS prices, how was
22 the value of production used to develop those prices,
23 how was that collected?

24 A I'm not certain how they collect that
25 information within the state of Kansas.

1 Within the state of Colorado, it
2 generally involves an individual designated by the
3 Statistic Service to collect information about prices
4 with local purchasers and verify that information
5 with phone calls.

6 The Statistic Service, I believe,
7 although I'm not an expert in how they acquire
8 information, they use a standard sampling technique
9 in order to do that, both with their yields and
10 prices.

11 Q But just to confirm, you don't know how
12 the NASS does it in north central Kansas?

13 A I do not know that.

14 Q Is the same true of the determination of
15 the number of bushels that is used to calculate the
16 price?

17 A I do not know specifically how they do
18 that.

19 Q Do you know what area -- over what area
20 the NASS District prices were applicable, according
21 to the NASS?

22 A I'm not certain. I would need to check,
23 but I believe these are prices from the north central
24 district in Kansas.

25 Q How many counties does that cover?

Page 40

1 A I'm uncertain how many counties that
2 covers. I believe it to be at least three counties.

3 Q Does it matter to you, when you are
4 doing this kind of analysis, how large an area you
5 are covering?

6 A Yes.

7 Q And why does it matter?

8 A If I'm interested -- if a yield or a
9 price is representative, I would be curious to find
10 out how information is reported and collected so that
11 I can determine if that is a representative price.

12 Q And did your curiosity lead you to
13 investigate with the NASS prices that you used which
14 counties those were derived from?

15 A I did look up the counties that
16 pertained to the north central district and so that
17 was the information that I gathered.

18 Q And do you recall how many counties that
19 covered?

20 A I do not recall that at this time.

21 Q If it were to turn out that the NASS
22 prices were developed over a large area, would that
23 be -- would it be appropriate to use those in the --
24 in the KBID area?

25 A I would have to study that more

1 comprehensively.

2 Q Turning to page 5 of your report, at the
3 top of the page you have a paragraph labeled small b
4 in parens. Do you see that?

5 A Yes, I do.

6 Q Could you summarize the points you are
7 making in that paragraph?

8 A I'm describing the relationship between
9 the average bushels per acre reported in the KBID
10 reports and the fallowing that took place in 2005;
11 that in 2005, the bushels per acre set a record as
12 reported in the KBID report and potentially one of
13 the reasons why an average yield would increase would
14 be that lower -- acres of lower productivity were
15 fallowed.

16 Q Are you aware that large areas were
17 fallowed in the KBID area above Lovewell Reservoir
18 during these years?

19 A That does appear in the annual report, I
20 believe, but I would have to check to be certain.

21 Q If that happened, do you know why it
22 happened?

23 A I don't know for certain why farmers
24 chose to fallow those fields, but in the report it
25 has been suggested that that was due to a reduced

1 delivery of irrigation water.

2 Q Right. So those acres that are observed
3 only above Lovewell Reservoir don't have the
4 advantage of Lovewell Reservoir; isn't that right?

5 A I'm not an expert in that particular
6 area, so I don't know how that water is delivered.

7 Q And if the acreage above Lovewell
8 Reservoir does not have the advantage of stored water
9 from Lovewell to supplement whatever other relief
10 might be available from the Republican River upstream
11 and those areas were, therefore, fallowed, it
12 wouldn't necessarily indicate that they were of lower
13 productivity. Would it?

14 A Can you repeat the question.

15 Q Yes. The fact that there was a good
16 deal of fallowing in the KBID surface water irrigated
17 acreage above Lovewell would not necessarily mean
18 that those acres are less productive than acres below
19 Lovewell; wouldn't you agree?

20 A I think that fallowing may occur for a
21 variety of reasons, which would include not having
22 supplemental water, not having direct flow water, a
23 choice by the farmers to enter into a conservation
24 reserve enhancement program, or for a variety of
25 other reasons.

1 Q On page 5 of your report and on page 6,
2 I guess both pages, you are discussing the views by
3 the Kansas experts of the crop production model that
4 they call IPYsim; is that right?

5 A That's correct.

6 Q One of the features that you discussed
7 has do with the calibration of that model to the
8 local conditions; isn't that right?

9 A I think specifically I address how the
10 model yield -- yields were increased in order to
11 represent -- or reproduce the KBID reported yield.

12 Q Do you agree that it's appropriate to
13 calibrate a crop production model to local
14 conditions, as long as it's done correctly?

15 A If it's done correctly, calibration
16 would make sense in a variety of applications.

17 Q I see on page 6, in the second-to-last
18 paragraph, that the last sentence, you say -- well,
19 maybe the last two sentences would put it in context.
20 You say, "Implicitly, at higher base yield generates
21 increasingly larger incremental yields with
22 additional water. I believe this to be inaccurate as
23 the accepted relationship between applied water and
24 crop yield is one of diminishing returns."

25 Did you make a determination as to

1 whether the IPYsim model recognizes the diminishing
2 -- the concept of diminishing returns?

3 A I did not have an electronic copy of
4 that model to evaluate, so I was unable to evaluate
5 that.

6 Q Turning over to the next page, page 7,
7 in the paragraph after the footnote under Table 3,
8 you state, "Importantly, the yield differences in
9 Table 3 will be reduced if supplemental irrigation is
10 available to the KBID farmers. I am unable to verify
11 if supplemental irrigation was available to these
12 producers."

13 Do I understand you to say, Doctor, that
14 you have not made any investigation of whether
15 supplemental groundwater irrigation is available to
16 KBID farmers?

17 A That's correct.

18 Q If there is no significant supplemental
19 groundwater irrigation to the KBID surface water
20 land, is it inappropriate not to discuss that in the
21 Kansas report?

22 A I'm not sure I understand that question.

23 Q Well, let me ask it a little
24 differently.

25 One inference that one could draw from

1 the Kansas report is that there is no significant
2 supplemental groundwater irrigation; isn't that
3 right?

4 A I don't recall reading that in the
5 Kansas report, so I'm not sure.

6 Q At least at this point, you have made no
7 investigation that tells you that there is any
8 significant groundwater supplemental water available?

9 A That's correct, I have made no
10 investigation.

11 Q Looking under your heading of "Variable
12 Costs and Fixed Costs," you indicate that -- on the
13 fourth line, you say "I have been unable to evaluate
14 the actual costs and calculations used in the EIA."

15 The EIA is an acronym that you created
16 to stand for the "economic impact analysis" by the
17 Kansas experts; is that correct?

18 A That's correct.

19 Q And you go on to say, "As an
20 alternative, I have located crop profit center
21 analysis for the 2001-2005 average costs and the 2006
22 crop costs from the Kansas Farm Management
23 Association."

24 Is that what you have there?

25 A That's correct.

1 Q Why did you choose 2001 through 2005
2 average costs, rather than the costs available for
3 2005 itself?

4 A The 2001-2005 average costs were those
5 available to me on the Internet at the Kansas State
6 University Ag Manager Info website.

7 Q Aren't the 2005 data also available on
8 that same website?

9 A They may not have been available at that
10 time. I don't recall why I was unable to find those.

11 Q Over the period since 2001, haven't a
12 lot of costs been increasing over that period?

13 A I would be unable to report on that for
14 the area for Kansas.

15 Q Well, if that were true, wouldn't it be
16 more appropriate to use the 2005 costs themselves?

17 A If available to me, I would use the 2005
18 costs.

19 Q I believe that you are referring there
20 to the -- as your source, the Northwest Kansas Farm
21 Management Association Profit Center Analysis:
22 5-Year Average and 2006; would that be correct?

23 A I don't have those documents in front of
24 me, but those sound correct.

25 MR. DRAPER: Let me ask Mr. Speed --

1 Sam, do you have a copy of a single-page document
2 without a heading?

3 MR. SPEED: Northwest Kansas Farm
4 Management Association Profit Center Analysis:
5 5-Year Average?

6 MR. DRAPER: Yes. If you do, I would
7 like to ask that that be made an exhibit to the
8 deposition.

9 (Deposition Exhibit 3 was marked.)

10 Q (BY MR. DRAPER) Doctor, do you have a
11 copy of Exhibit 3?

12 A I do.

13 Q And is this the information that you
14 asked for your analysis?

15 A I can't say for certain, but I believe
16 this is where it came from.

17 Q Did you investigate the assumptions on
18 which these values were prepared?

19 A I have a general understanding of the
20 process used by the Farm Management Associations. I
21 didn't investigate specifically how these were
22 prepared.

23 Q In particular, I would inquire whether
24 you are aware of whether shared expenses in crop
25 share arrangements are included or not?

1 A I can't answer that question at this
2 time.

3 Q Would the answer to that question make a
4 difference in how you do this?

5 A I'm not sure. I would have to study
6 that more.

7 Q These values are for northwest Kansas;
8 is that right?

9 A That's correct.

10 Q And the area we are analyzing in this
11 case is not in northwest Kansas, is it?

12 A I don't believe it is within the
13 Northwest Kansas Farm Management Association.

14 Q In the center of this page, there is a
15 group of items under the heading "Expenses." Do you
16 see that?

17 A Yes, I do.

18 Q These are the costs of production for
19 northwest Kansas. Did you investigate whether these
20 costs were applicable to the KBID area?

21 A No, I did not. I felt this was the
22 closest approximation to that.

23 Q If you cast your eye down under the list
24 of expenses about a little more than halfway, you
25 find "Irrigation Fuel - Pumping." Do you see that?

1 A I do see that expense.

2 Q And if we go over to the third column of
3 numbers to the right, you see the figure 66.75?

4 A I do see that.

5 Q And that's under, the heading for that
6 column is dollars per acre.

7 A That's correct.

8 Q And would that indicate that the
9 irrigation fuel - pumping expenses for this budget
10 are \$66.75 per acre?

11 A That's correct.

12 Q Now, in the Kansas Bostwick Irrigation
13 District, assuming no groundwater pumping, takes all
14 of its water as surface water delivered through
15 project of which KBID is a part, what would the
16 irrigation fuel - pumping charges be per acre?

17 A I'm unable to verify that because I
18 don't know if pumps are used to move the water in
19 KBID.

20 Q And if it was simple gravity flow, what
21 would be the irrigation fuel - pumping charges per
22 acre?

23 A I can't verify that.

24 Q You wouldn't be able to figure what that
25 value would be?

1 A I would have to investigate it further
2 to determine what that value was.

3 Q What would you need to know?

4 A There would be a list of things that I
5 would want to include, but that might also include if
6 any pumps are used to put water into, say, a storage
7 pond and then pump through a center pivot irrigation;
8 I would want to know if any of those types of things
9 were used in the irrigation process.

10 Q And if there were no significant pumping
11 to storage ponds or to center pivots, what would the
12 value be in that column?

13 A That's difficult for me to answer
14 without actually being able to investigate it
15 further.

16 Q Under those assumptions, would there be
17 any item that would raise that amount above zero?

18 A Again, I would want to investigate that.
19 There is a variety of the hybrid sorts of irrigation
20 systems that are used in Colorado that involve
21 pumping from ditches, that involve pumping from
22 storage ponds, that involve moving water from one
23 location to another, all of which use energy inputs
24 that would represent a cost.

25 Likewise, if there is a substitution

1 between labor in which ditches are set, dikes are
2 set, tubes are set, there is substitution between the
3 energy cost and the labor cost, in which case I would
4 want to make an adjustment for that.

5 Q If you were to find that there was
6 pumping from ponds to the fields or from a ditch to
7 the fields, those would involve pumping lifts of
8 several feet, something in that range, wouldn't they?

9 A I'm not an irrigation -- an agriculture
10 engineer specializing in irrigation, so I can't
11 really comment on that.

12 Q Well, if we assume for a minute that it
13 was just a few feet, let's say a maximum of 5 feet of
14 lift that was needed for such surface water
15 adjustments, as you mentioned, that would be
16 significantly less than the pumping lift needed to
17 bring water up from a well; isn't that right?

18 A I'm sorry, but that's not my area of
19 expertise, so I can't comment on that.

20 Q Wouldn't that make a difference in the
21 numbers that you are using in this expert analysis?

22 A I'm sorry, since I'm not an expert in
23 that area, I can't really comment on that.

24 Q Do you know whether such matters need to
25 be investigated in order for you to finalize your

1 opinions on the exact numbers in this case?

2 A I think that additional information
3 would be useful, but I don't know how that
4 information might influence what my estimates are or
5 those of the Kansas experts.

6 Q Where in northwest Kansas would these
7 figures -- do you know what the source of water is in
8 northwest Kansas? Do --

9 A I'm not an expert -- I'm sorry.

10 Q I'm sorry, I interrupted you. Let me
11 finish my additional part so that my question is
12 clear.

13 Do you know what the source of
14 irrigation water is in northwest Kansas?

15 A Not comprehensively, no.

16 Q Do you know at all?

17 A I believe there to be some center pivot
18 irrigation in northwest Kansas. I don't know of the
19 amount of surface irrigation that takes place in
20 northwest Kansas.

21 Q If there were a large difference between
22 northwest Kansas and the KBID Irrigation District
23 with respect to the reliance on groundwater wells,
24 would that make a difference in the irrigation fuel -
25 pumping costs?

1 A I'm not an expert in that area.

2 Q Are you an expert in whether it's
3 appropriate to use the Northwest Kansas Farm
4 Management Association expenses to value the costs in
5 the KBID project?

6 A I cannot say that the northwest Kansas
7 costs are the same as those in the KBID project. I
8 found, within the timeframe that I had, these were
9 the costs that would serve as the best proxy for that
10 area.

11 Q When did you start your analysis for
12 purposes of your report in this case?

13 A I'm uncertain. I think Mr. Ampe might
14 know specifically. I believe there were about three
15 weeks in between the time that I began the analysis
16 and I turned in the report.

17 Q If we could turn in your report to page
18 9, I would like to direct your attention to Table 5.

19 What does Table 5 show?

20 A It summarizes for the area that is below
21 Lovewell, the total revenue per acre under full
22 irrigation, total revenue per acre under actual
23 irrigation and total costs to summarize potential
24 forgone profits for the crops of alfalfa, corn, milo
25 and soybeans.

1 Q All of the values here are dollars
2 values per acre?

3 A They are until we get to the row that
4 says, "Forgone Profit Per Acre," the next row
5 is "Crop Acres," and after that row is "Total Forgone
6 Profit by Crop." So that would be dollars, rather
7 than dollars per acre.

8 Q If I understand correctly, the top part
9 of Table 5 relates to the year 2005 and the bottom
10 part relates to the year 2006?

11 A That's correct.

12 Q I would like to work through an example
13 with you to make sure we understand how you did your
14 analysis here.

15 The last row on my page -- I think it's
16 going to be the same for you -- page 9, is the second
17 line under 2006, which is identified as Total Revenue
18 (Actual Irrigation)?

19 A That's correct.

20 Q And if we read to the right across, we
21 have the four crops that you mentioned, the values
22 for them?

23 A That is correct.

24 Q And that is a dollar value per acre; is
25 that right.

1 A That's correct.

2 Q If we look, as an example at corn, we
3 see a value of \$394.31?

4 A That's correct.

5 Q How did you derive that value?

6 A I would need to look through my notes to
7 make certain that I'm correct; but, in general, I
8 would say that this uses a yield assumption
9 multiplied by a National Agricultural Statistic
10 Service price to generate total revenues.

11 Q And would the price -- or the yield, I
12 think you mentioned first, would that be found on
13 Table 1 on page 4 of your report?

14 A Table 1 has crop prices associated with
15 it. So I don't think that's Table 1 that would have
16 the yields.

17 Q I see. Okay.

18 Now, price is part of what is needed for
19 total revenue per acre?

20 A That's correct.

21 Q So the price that would be is the price
22 that you would use here in Table 1?

23 A Yes.

24 Q Would it be the 2006 price for corn
25 under the Alternative Analysis?

1 A That's correct.

2 Q And would that be \$2.62?

3 A That's correct.

4 Q And that \$2.62 needs to be multiplied
5 times the yield; is that right?

6 A That's correct, in order to generate
7 total revenues.

8 Q And is the yield that would be
9 applicable here, is that -- does that appear on --

10 A I'm sorry, could you repeat that. That
11 cut out.

12 Q I'm sorry.

13 Does the yield that would be relevant,
14 does that appear on Table 3 in your report on page 7?

15 A I believe it does. I would need to
16 check my notes, but I believe that is where I
17 referenced the yield.

18 Q Turning to that page, that Table 3 is
19 yield losses using the IPYsim yield forecasts from
20 Table 10 of the BIA. And it has a top section for
21 2005 and a lower section for 2006?

22 A That's correct.

23 Q And in the 2006 portion of the table,
24 it's divided two into parts. One above Lovewell and
25 one below Lovewell; is that right?

1 A That's correct.

2 Q Since, in Table 5, we are looking at
3 foregone profits below Lovewell, we would look at the
4 lower part of the 2006 figures in Table 3?

5 A Below Lovewell?

6 Q Yes.

7 A Yes, that's correct.

8 Q The second line there you identified
9 actual irrigation in bushels?

10 A That's correct.

11 Q I guess it's bushels per acre?

12 A Correct.

13 Q If we look at the column, you have got
14 the four crops there, but the first one is corn and
15 showing 142.6 bushels per acre; is that right?

16 A That's correct.

17 Q So if we take a product of the price of
18 \$2.62 and the yield of 142.6 bushels per acre, should
19 we get the \$394.31 that you show in Table 5?

20 A I believe so, but I would need to check
21 my notes.

22 Q I was just doing it with my calculator
23 as we lined out those numbers. If I'm doing it
24 correctly, I calculate \$373.61.

25 I understand it's not practical for you

1 to check that right at this moment?

2 A That's correct.

3 Q Could you check that and let us know,
4 through your counsel, whether my value of \$373.61 is
5 correct for that particular item, which I will
6 mention, to be clear, it's for corn; it's shown in
7 Table 5, for corn in 2006, that the total revenue for
8 actual irrigation in dollars per acre. It's right at
9 the bottom of page 9 of your report.

10 Would that be possible?

11 A Yes.

12 Q Thank you.

13 But as far as you can tell, I have gone
14 through the right motions, as far as you can tell,
15 just following from the report?

16 A That's correct.

17 Q And if there were a difference in that
18 value, would it affect the bottom-line value that you
19 determined?

20 A I would need to investigate it, but
21 certainly that would be something I would want to
22 investigate.

23 Q Well, it might affect your bottom-line
24 values?

25 A Potentially.

1 Q Turning to the next page, page 10, here
2 you have in the center of the page, there is a
3 heading, "Profits Above Lovewell."

4 What generally was this -- was the
5 analysis that you performed that is reported in this
6 section?

7 A I believe that one of the areas of
8 interest for the Kansas expert report is forgone
9 profits for lands above Lovewell that were not
10 irrigated and were planted instead to nonirrigated
11 crops.

12 And so my attempt was to see how -- what
13 -- how those economic loses were derived and under
14 alternative assumptions, what those economic losses
15 might be.

16 Q Do the Northwest Kansas Farm Management
17 Association costs, do they figure in this analysis?

18 A I would need to check my notes, but I
19 believe that in some cases they would.

20 Q What was your overall conclusion in this
21 section with respect to profits above Lovewell?

22 A The -- my conclusion was that for
23 particular crops, the profits per acre were actually
24 negative if they had been planted above Lovewell and
25 that some were positive. And the net effect, the

1 difference between irrigated and nonirrigated profit
2 was actually negative.

3 Q And what did that tell you?

4 A I'm not sure I understand that question.

5 Q What would be the implication of a
6 negative value in Lovewell?

7 A That irrigated cropping, on balance, was
8 not profitable in that area under the assumptions of
9 this analysis.

10 Q Do you know whether irrigated
11 agriculture for the crops that showed up with
12 negative values have actually been occurring in the
13 area above Lovewell Reservoir?

14 A I'm not aware of that.

15 Q Why did you pick those crops to analyze
16 that, then, if you didn't know whether they were
17 above Lovewell or not?

18 A I believe your question previously was,
19 did I understand if there were -- those crops were
20 negative -- negatively profitable? Is that -- I'm
21 not sure of the specific question, but I thought you
22 were addressing profitability.

23 Q Okay. I'm sorry, let me just try to
24 make my question clear.

25 Are you aware -- let's see, if I'm

1 looking at Table 6, I see certain values that are
2 negative in the row that is identified as Total
3 Profit By Crops. I see corn is negative, milo is
4 negative, sunflowers are negative and ensilage is
5 negative.

6 Do you know whether those crops have
7 actually been grown under irrigation in the area
8 above Lovewell historically?

9 A I do not have a crop survey that would
10 tell me that those crops were grown.

11 Q Why did you analyze those?

12 A I was responding to the report that came
13 from the Kansas experts that listed the crops that
14 were produced in that area.

15 Q And when you obtained negative numbers,
16 did that make you question whether irrigation should
17 ever occur for those crops in the area above
18 Lovewell?

19 A I can't infer that. No, I can't infer
20 that.

21 Q It makes sense for a farmer to undertake
22 the irrigation of crops under the assumptions that
23 you have used in your analysis?

24 A I'm aware of farmers who grow crops
25 expecting them to be profitable but do not yield

1 those profits at the end of the season.

2 Q Is it appropriate to conclude, then,
3 from these figures that are negative, that your
4 analysis showed that it would not have been
5 profitable to irrigate those crops in 2005?

6 A Under the assumptions of my analysis,
7 those crops did not generate positive returns.

8 Q And so if irrigation water were denied
9 those crops by Nebraska, Nebraska would actually have
10 been doing Kansas a favor in this regard; is that
11 right?

12 A I'm not sure that is exactly what I
13 would conclude.

14 Q You have two parts to Table 6. The
15 whole table is entitled "Profit Difference of
16 Irrigated Crop Production and Nonirrigated Production
17 Above Lovewell 2005."

18 And you have, say, five rows of figures
19 and so on. Then below that, which actually appears
20 at the top of page 11, you have a section of the
21 table entitled "Forgone Irrigated Crop Productions."

22 Could you explain to me what the
23 relationship -- what you are doing in those two parts
24 of Table 6?

25 A Certainly. I think that the farmers who

1 would be above Lovewell would be able to plant
2 dryland crops and generate net returns from those
3 dryland crops and they might be able to plant
4 irrigated crops and generate net returns from those
5 irrigated crops.

6 If they were to receive water
7 deliveries, they might choose to produce the dryland
8 rather than the irrigated. And so in that table, I'm
9 trying to calculate what the difference is between
10 irrigated cropping and nonirrigated cropping.

11 Q Which is the irrigated and which is the
12 nonirrigated?

13 A The bottom half of the table is the
14 foregone crop production; the nonirrigated production
15 is the production that is above.

16 Q Let's see. The top part is
17 nonirrigated. I just wanted to understand your
18 terminology.

19 Are these acreages that normally would
20 receive surface water but, because of the shortage,
21 did not?

22 A I believe that's what I was responding
23 to in the Kansas experts' report; that there was a
24 set of acres that were fallowed, and these acres
25 represent those fallowed acres.

1 Q And then the acres that you are talking
2 about in the second half of your table, which acres
3 are those?

4 A I believe those would be similar; that
5 they would be referencing acres that were fallowed
6 that might have been -- actually, the term "fallowed"
7 may not make sense in this case. These would have
8 been irrigated crop acres related to those that had
9 been -- had been shifted to nonirrigated crop use.

10 Q Now, are the two crop mix, what are
11 they? Are they the same acres or are they different
12 acres?

13 A The crop mix may be different between
14 the two, the two reported acres. So corn in the
15 upper part of Table 6, the acres allocated to that
16 would be different than those that are allocated to
17 corn on an irrigated basis.

18 Q It's the same total acres, but it's
19 distributed differently in the two parts of the
20 table?

21 A It's certainly distributed differently.
22 I would need to check my notes or add up to make sure
23 that the acres are the same.

24 Q Should they be the same?

25 A Yes.

1 Q Okay. So we are talking about the same
2 acreage, but under two different analyses; is that
3 right?

4 A The same acreage, whether it be
5 irrigated, chosen for irrigated crop production, or
6 acres chosen for nonirrigated crop production.

7 Q Is there a difference between
8 nonirrigated crops and foregone irrigated crop
9 production? I'm sorry, just -- if you could help me
10 for a second, I just can't understand what the
11 differences are.

12 A Foregone irrigated would be those acres
13 planted to irrigated crops. The nonirrigated would
14 be those crops that would not receive irrigation.

15 Q Okay. So in the year in question, then,
16 I guess it's 2005, the upper part of the table would
17 be analysis for acreages that used -- in other years
18 might have been irrigated, but in this -- in 2005
19 received no surface water irrigation?

20 A Correct.

21 Q The second part of the graph -- of the
22 table would analyze acreages for the effect of
23 receiving less irrigation --

24 THE COURT REPORTER: Mr. Draper, would
25 you repeat that? It blanked out and I didn't get the

1 last part.

2 Q (BY MR. DRAPER) The second part of
3 Table 6, which show your analysis for acreage that
4 received less irrigation water, but still some
5 irrigation water in 2005; is that right?

6 A I believe that to be the case.

7 Q At the bottom of the table in the first
8 column with numbers in it, the last two lines show
9 negative numbers. Could you explain what those
10 represent?

11 A The first in the upper line, the Total
12 Potential Irrigated Profits represents -- under the
13 assumptions that I have used in the analysis,
14 represents negative profits to the balance of crops
15 that might have been irrigated above Lovewell.

16 The second line examines the profits
17 under a scenario under my assumptions in which
18 nonirrigated crops were produced from the upper half
19 of the table and the difference between that and what
20 the irrigated profits were.

21 Q And the fact that your final number was
22 negative, what did that tell you for purpose of your
23 analysis?

24 A It implies that on the assumptions I
25 have made, nonirrigated crop production would have

1 been more profitable than irrigated crop production.

2 Q How did you use that number in your
3 analysis?

4 A The -- when assessing the economic
5 losses associated with insufficient water delivered
6 above Lovewell, I found that nonirrigated crop
7 production was more profitable than irrigated crop
8 production. For that reason, I made the economic
9 loss zero.

10 Q And why would that be set at zero?

11 A In that case, I felt that no economic
12 loss was found in that area, under those assumptions.

13 Q Was another implication of your negative
14 number that it was actually a benefit to Kansas of
15 not receiving irrigated water?

16 A I'm not sure that I could comment on the
17 benefit to Kansas; but for farms that produced
18 nonirrigated crops, under these assumptions, they
19 were more profitable than those that produced
20 irrigated crops.

21 Q You didn't actually use your negative
22 \$372,173.18 in your ultimate analysis; is that
23 correct?

24 A No, I did not.

25 Q Now, in Table 7, which starts at the

1 bottom of that page, you indicate that is profit
2 difference of irrigated crop production and
3 nonirrigated crop production above Lovewell (2005).

4 Is Table 7 a table that applies to
5 analysis for the year 2005?

6 A There is a typographical error in the
7 title. It applies to 2006.

8 Q Okay. So this -- that should be
9 changed?

10 A Correct.

11 Q Looking at the second line of Table 7,
12 you have total costs for the various crops; is that
13 right?

14 A That's correct.

15 Q Those values are dollars per acre?

16 A That's correct.

17 Q Just looking at -- it's a little offset
18 on my printout, but I believe the corn value showed
19 as \$215.86?

20 A That's correct.

21 Q And turn back two pages, would you, to
22 page 10. At the bottom of that page, which is the
23 same table only for the year 2005, if we look at that
24 item Total Costs for corn, do you see a value of
25 \$215.86?

1 A That's correct.

2 Q Should those numbers be the same?

3 A Correct.

4 Q So the cost of corn production in 2006
5 were exactly the same to the penny as cost of
6 production in 2005?

7 A I would need to investigate my notes to
8 determine if those are actually the same costs or
9 not. The cost information comes from those Farm
10 Management reports that we spoke of earlier, and I
11 would want to verify that.

12 Q Okay. Looking back at Exhibit 3 to the
13 deposition, which is Northwest Kansas Farm Management
14 Association budget, if I may -- it's a single-sheet
15 document. This has the values per -- average value
16 for 2001 through 2005, and that's what you actually
17 used for 2005; is that right?

18 A This is irrigated crop production, the
19 copy that I have, and we are referring to
20 nonirrigated crop production in that table.

21 Q Okay. That part of the table is on
22 nonirrigated, the lower part of each of these tables
23 would be the irrigated part; is that right?

24 A That's right.

25 Q Okay. So that value of \$215.68 for

1 total cost for corn is the same for 2005, as you have
2 listed, I think you said you used an average; but
3 your value for 2005 is exactly the same for corn as
4 the value you have for corn in 2006, correct?

5 A The Table 6 and Table 7 use the same
6 cost production for the nonirrigated crops.

7 Q And that's true of all of the crops?

8 A That's correct.

9 Q And is it your understanding that that
10 is the way it should be handled?

11 A I'm not sure -- I'm not sure what your
12 question means.

13 Q Whether the -- for each of these crops,
14 the nonirrigated costs for each of the crops should
15 be the same for 2005 and 2006?

16 A I would like to review the information
17 and determine if they should be the same.

18 Q Once you have determined that, could you
19 convey that information to your counsel?

20 MR. DRAPER: And, Pete, could you let us
21 know what the conclusion is on that?

22 MR. AMPE: I will do so.

23 MR. DRAPER: Thank you very much.

24 MR. AMPE: By my watch, it's a quarter
25 to 5:00. I'm not sure if you want to take another

1 break or just go straight through to 5:00.

2 MR. BLANKENAU: That is a helpful point
3 because we do want the finish by 5:00. Yeah, we
4 might take a five-minute break here and finish up by
5 5:00.

6 MR. AMPE: We will vacate the room
7 again.

8 MR. BLANKENAU: Thank you.

9 (Break was taken.)

10 Q (BY MR. DRAPER) Doctor, just a few
11 final questions.

12 Turning to page 13 of your report, you
13 have there your analysis of the indirect impact of
14 forgone household income, correct?

15 A That's correct.

16 Q And for purposes of this part of your
17 analysis, you used the same multiplier that the
18 Kansas experts did for this purpose?

19 A I did.

20 Q On the next page you, under the heading
21 of "Interest Expense," you draw a distinction as to
22 which element of the direct and indirect expenses
23 should be subject to interest.

24 What was your conclusion -- what were
25 your conclusions in that regard?

1 A I think in this section, I'm
2 specifically referring to the interest rate that is
3 used to compound.

4 In my opinion, the interest rate
5 represents an opportunity cost of forgone opportunity
6 for farms to use those funds elsewhere, if they did
7 not receive them.

8 In my opinion, the forgone profits would
9 likely be used to either retire debts or to reinvest
10 back in the operation. The debt is of a specific
11 type, meaning term debt, so that debt that extends
12 beyond -- beyond one year and so the interest rates
13 that I used reflected the Federal Reserves Tenth
14 District's interest expense -- or interest rates on
15 that term debt.

16 Q Just thinking about the aspect of the
17 indirect impacts. Do the indirect impacts, do they
18 represent actual losses to businesses and
19 individuals?

20 A Yes. The indirect effects are those
21 effects that are forgone opportunities to provide
22 inputs and services to farmers.

23 Q And that income that did not appear, it
24 could have been invested or put in the bank, just
25 like direct losses, couldn't it?

1 A I don't necessarily believe that to be
2 true.

3 The indirect effects would be sales, not
4 necessarily profits. And so I think we think of
5 profits as being something that we can reinvest and
6 it would be difficult for me to say how much of that
7 would be profits back to businesses.

8 Q To the extent that it was reduced
9 profits of third parties, would that be appropriate
10 to apply interest to those profits?

11 A Profits could be reinvested either into
12 the business or used to retire term debt, yes.

13 MR. DRAPER: Well, it's 2 minutes of
14 5:00, by my clock. I think this is a good place to
15 leave it, for my part, anyway. I thank you very
16 much.

17 Other attorneys may have questions, but
18 I appreciate your help and participation this
19 afternoon, Doctor.

20 THE DEPONENT: Thank you.

21 MR. BLANKENAU: We just have an hour or
22 so to go over some questions.

23 Just kidding. We don't have any
24 questions.

25 MR. AMPE: I just have one follow-up

1 question.

2 Doctor, are you aware what the crop
3 irrigation requirement of the Afghanistan poppy would
4 be?

5 (Laughter throughout at this point.)

6 MR. BLANKENAU: Dude?

7 MR. DRAPER: Pete, I'm envious that the
8 idea of such a question wasn't formulated and
9 articulated with the grace you did.

10 MR. AMPE: It's just something I have
11 always wondered about, if they have to irrigate those
12 or not.

13 I don't have any other questions.

14 MR. DRAPER: I guess that should do it.

15 Thank you very much, Doctor.

16 (WHEREUPON, the deposition concluded at
17 5:00 p.m.)

1 I, JAMES PRITCHETT, do hereby certify
2 that I have read the foregoing transcript and that
3 the same and accompanying correction sheets, if any,
4 constitute a true and complete record of my
5 testimony.

6
7
8
9 _____
Deponent

10 () No changes

() Amendments attached

11
12 Subscribed and sworn to before me this
13 _____ day of _____,
14 2009.

15 My commission expires _____
16

17 _____
Notary Public

18
19 cp

20
21 REPUBLIC RIVER COMPACT ADMINISTRATION
22
23
24
25

1 STATE OF COLORADO)
2) ss. REPORTER'S CERTIFICATE
3 COUNTY OF DENVER)

4 I, Carol Patterson, do hereby certify
5 that I am a Registered Merit Reporter and
6 Notary Public within the state of Colorado; that
7 previous to the commencement of the examination,
8 the deponent was duly sworn by me to testify to the
9 truth.

10 I further certify that this deposition was
11 taken in shorthand by me at the time and place
12 herein set forth and was thereafter reduced to
13 typewritten form, and that the foregoing constitutes
14 a true and correct transcript.

15 I further certify that I am not related to,
16 employed by, nor of counsel for any of the parties
17 or attorneys herein, nor otherwise interested in the
18 result of the within action.

19 In witness whereof, I have affixed my
20 signature this 4th day of March, 2009.
21

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March 4, 2009

PETER J. AMPE, ESQ.
Office of the Attorney General
First Assistant Attorney General
1525 Sherman Street, 7th Floor
Denver, Colorado 80203

Caption: REPUBLIC RIVER COMPACT ADMINISTRATION
Case No.: Supreme Court 126
DEPOSITION OF: JAMES PRITCHETT

Dear Mr. Ampe:

The deposition in the above-entitled matter is ready
for reading and signing. Please attend to this
matter by complying with ALL blanks checked below.

XX arranging with us at (303) 696-7680 to read.
and sign the deposition in our office.

OR (if applicable),

XX have deponent read your copy; signing attached
original signature page and any amendments
sheets.

_____ read enclosed deposition, sign attached
signature page and any amendment sheets.

XX by March 6, 2009, due to trial date of 3/9/09

Please be sure that the signature page and
accompanying amendment sheets, if any, are signed
before a notary public and returned to our office at
the above address.

If this matter has not been taken care of within said
period of time, the deposition will be filed unsigned
pursuant to the Rules of Civil Procedure.

Thank you.

Enclosures: Don Blankenau, Esq.; John B. Draper, Esq.

Page 78

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March 4, 2009

JOHN B. DRAPER, ESQ.
Montgomery & Andrews
325 Paseo de Peralta
Santa Fe, New Mexico 87501

Caption: REPUBLIC RIVER COMPACT ADMINISTRATION

Case No.: Supreme Court 126

Enclosed is the deposition of: JAMES PRITCHETT

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____ Signed, no changes.

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____ Original exhibits included in ongoing notebook
and will be filed with counsel at conclusion of
discovery.

Enclosures: (As above noted)

cc: Peter J. Ampe, Esq; Don Blankenau, Esq.